IN THE SUPREME COURT OF MISSOURI

No. SC87146

EMERSON ELECTRIC CO., Appellant,

v.

DIRECTOR OF REVENUE, Respondent.

ON PETITION FOR REVIEW FROM THE MISSOURI ADMINISTRATIVE HEARING COMMISSION THE HONORABLE KAREN A. WINN, COMMISSIONER

APPELLANT'S BRIEF

BRYAN CAVE LLP
Ann K. Covington, #26619
Brenda L. Talent, #35568
One Metropolitan Square
211 N. Broadway, Suite 3600
St. Louis, Missouri 63102
akcovington@bryancave.com
brenda.talent@bryancave.com
Telephone: (314) 259-2000

Facsimile: (314) 259-2000

Carole L. Iles, #33821 221 Bolivar Street, Suite 101 Jefferson City, MO 65101 carole.iles@bryancave.com Telephone: (573) 556-6622 Facsimile: (573) 556-6630

Attorneys for Appellant

TABLE OF CONTENTS

TABLE OF	AUTH	IORITI	ES4		
JURISDICT	ΓΙΟΝΑ	L STAT	TEMENT7		
STATEME	NT OF	FACTS	S8		
1.	Intro	ntroduction8			
2.	Histo	ory of the Case8			
3.	Emer	erson's Operations9			
	A.	Overv	view9		
	B.	The N	Motor Technology Center ("MTC")		
	C.	The P	Processes by Which Products are Manufactured for Specific		
		Custo	omers		
		(i)	The Co-Development Production Process		
		(ii)	The Customization Production Process		
	D.	The N	Machinery		
		(i)	The CAD System		
		(ii)	The Stereolithography Machine ("SLA machine") 16		
		(iii)	The Dynamometer		
STATEME	NT OF	THE IS	SSUE		
STANDAR	D OF F	REVIEV	V		
POINT REI	LIED O	N	21		
ARGUMEN	۱T		23		

1.	The Machinery was Used Directly in Manufacturing			
	A.	Introduction		
	B.	The "Integrated Plant Doctrine"		
	C.	The Machinery was Used Directly in Manufacturing		
		(i) Design and Testing Activities are an Integ	gral Part of	
		Manufacturing	30	
		(ii) The CAD System	31	
		(iii) The SLA Machine	32	
		(iv) The Dynamometer	33	
		(v) All of the Machinery is Essential and Inte	gral to	
		Manufacturing	34	
	D.	The Director's Regulation Confirms that the Machinery is		
		Exempt	35	
	E.	"Research and Development" In this Case is an I	Integral Part of	
		Manufacturing Specific Products for Specific Customers		
	F.	The True Object Test Demonstrates that the Machinery was		
		Used Directly in Manufacturing		
	G.	The Machinery was Used for Plant Expansion	44	
CONCLUS	ION		46	
CERTIFICA	ATE O	SERVICE AND COMPLIANCE	48	

TABLE OF AUTHORITIES

Missouri Statutes

Section 135.100	38
Section 135.100(11)	37
Section 144.030	28
Section 144.030.2(5)	4, 35, 37, 38, 39, 40, 44-45
Section 144.615(3)	24
Section 621.193	20
Missouri Cases	
Bridge Data Co. v. Director of Revenue,	
794 S.W.2d 204 (Mo. banc 1990)	39, 40
Concord Publishing House, Inc. v. Director of Revenue,	
916 S.W.2d 186 (Mo. banc 1996)20, 21, 25, 28-29, 31	, 35, 39, 40, 41, 43, 44, 45
DST Systems v. Director of Revenue,	
43 S.W.3d 799 (Mo. banc 2001)	25, 29, 44
Floyd Charcoal Co. v. Director of Revenue,	
599 S.W.2d 173 (Mo. 1980)	25, 26, 27, 35, 38, 39
Galamet, Inc. v. Director of Revenue,	
915 S.W.2d 331 (Mo. banc 1996)	26
Heidelberg Central, Inc. v. Director of Revenue,	
476 S.W.2d 502 (Mo. 1972)	39
Iron County v. State Tax Commission,	
437 S.W.2d 665 (Mo. banc 1968)	20

Mid-America Dairymen, Inc. v. Payne,
990 S.W.2d 648 (Mo. App. S.D. 1999)
Noranda Aluminum, Inc. v. Department of Revenue,
599 S.W.2d 1 (Mo. 1980)25, 26, 27-28, 29, 34, 38
Sneary v. Director of Revenue,
865 S.W.2d 342 (Mo. banc 1993)
Southwestern Bell Telephone Company v. Director of Revenue,
182 S.W.3d 226 (Mo. banc 2005)
State ex rel. Ozark Lead Co. v. Goldberg,
610 S.W.2d 954 (Mo. 1981)39
West Lake Quarry & Material Co. v. Schaffner,
451 S.W.2d 140 (Mo. 1970)
Zip Mail Services, Inc. v. Director of Revenue,
16 S.W.3d 588 (Mo. banc 2000)
Other State's Cases
Niagara Mohawk Power Corp. v. Wanamaker,
286 App. Div. 446, 144 N.Y.S.2d 458 (1955)
Pledger v. EASCO Hand Tools, Inc.,
304 Ark. 47, 800 S.W.2d 690 (Ark. 1990)
Tax and Accounting Software v. Oklahoma Tax Commission,
OK Tax Rep. (CCH) ¶ 200-796 (Okla. Ct. App. Feb, 25, 1997)
United Design Corporation v. Oklahoma Tax Commission,
1997 OK 43, 942 P.2d 725 (Okla. 1997)

Other Authority

Mo. Const. Art. V, § 3	7
12 CSR 10-3.348	40
12 CSR 10-103.600	41
12 CSR 10-111.010(2)(B)	45
12 CSR 10-111.010(4)(F)	35-36, 37

JURISDICTIONAL STATEMENT

This appeal involves the construction of Section 144.030.2(5)¹, which provides an exemption from Missouri sales and use tax for "machinery and equipment, . . . purchased and used to establish new or to expand existing manufacturing, mining or fabricating plants in the state if such machinery and equipment is used directly in manufacturing, mining or fabricating a product which is intended to be sold ultimately for final use or consumption." Section 144.030.2(5) is a revenue law of the State of Missouri; therefore, this Court has exclusive jurisdiction of this appeal under Article V, § 3 of the Missouri Constitution.

All statutory citations are to the Revised Statutes of Missouri of 2000, as amended, unless otherwise noted. The pertinent language of the statutes at issue in this case are set forth therein. Although Section 144.030.2(5) was amended in 1998, the amendment did not change the language relevant to this case.

STATEMENT OF FACTS

1. Introduction

At issue in this case is whether three purchases by Emerson are exempt from Missouri use tax pursuant to Sections 144.030.2(5) and 144.615(3): a computer assisted design system ("CAD system"), a stereolithography machine ("SLA machine"), and a dynamometer. The Director of Revenue (the "Director") and Emerson agree that these items constitute machinery or equipment for purposes of the sales and use tax statutes (L.F. 96).

The record in this case includes the decision of the Administrative Hearing

Commission (the "Commission") (L.F. 148-183) (Appendix A1-36); the transcript of the

December 1, 2004 hearing before the Commission; the exhibits admitted into the record

by the Commission, including Petitioner's Exhibits 1-6, 6-A, 7-15, 17, 18, 20-24, and 27
29, and Respondent's Exhibits A-J; and the Partial Stipulation of Facts submitted to the

Commission by the parties following the hearing, including Stipulation Exhibits 1-6

(L.F. 95-147).² The relevant facts are not in dispute.

2. History of the Case

Following an audit, the Director issued an assessment of Missouri use tax on Emerson's purchase of the dynamometer. Emerson paid Missouri use tax in connection with its purchase of the SLA machine and CAD system, and applied for a refund of the tax, based on its claim that the items are exempt under Section 144.030.2(5). The

3

² Citations to the transcript are "Tr. ____." Citations to exhibits are "Ex."

Director denied the refund claims. The assessment and the refund claims at issue in this case relate to the tax periods from April 1994 through April 1998 (the "tax periods at issue") (L.F. 148). The amount of tax at issue with respect to the dynamometer is \$25,521.79 (L.F. 95, 166). The tax paid by Emerson on the SLA machine and the CAD System was \$8,510.34 and \$1,367.54, respectively (L.F. 96, 166).

Emerson appealed the assessment of tax on the dynamometer and the Director's denial of the refund claims for the SLA machine and CAD system in three separate petitions filed with the Commission (L.F. 1-4, 7-86, 89-90). The three appeals were consolidated by the Commission into a single case (L.F. 148).

The Commission conducted a hearing on December 1, 2004, during which Emerson presented testimony and exhibits concerning the use of the machines at issue and its manufacturing operations. Following the hearing, the parties supplemented the record by submitting a joint "Partial Stipulation" with exhibits (L.F. 95-147).

The Commission's decision upheld the Director's assessment and the denial of the refund claims, and Emerson filed this Petition for Review of the Commission's decision.

3. Emerson's Operations

A. Overview

Emerson is a Missouri corporation with its headquarters in St. Louis, Missouri. During the tax periods at issue, Emerson's business activities included manufacturing and selling electric motors and other products (L.F. 149). Emerson's business was organized into a number of different corporate divisions, including five divisions that produced electric motors (Tr. 21; L.F. 150).

B. The Motor Technology Center ("MTC")

Emerson operates fifteen laboratories which together comprise the Motor Technology Center ("MTC") (Pet. Ex. 1; L.F. 150). The MTC is located in a 130,000 square foot, three-story building on the campus of Emerson's St. Louis headquarters (Tr. 20; L.F. 149). Emerson used all three of the machines at issue in this case at the MTC (Tr. 34; L.F. 160). From a financial standpoint, the MTC is an extension of Emerson's divisions, as all of the expenses incurred at the MTC are paid by the divisions (T.R. 17; L.F. 150).

The claim for exemption for the subject machinery rests on its use in production of products specifically requested by and sold to customers. During the tax periods at issue, Emerson's employees at the MTC developed designs, drawings and plans for the production of motors that Emerson manufactured at the specific request of its customers. They created prototypes of these motors, and they improved the design of these motors during mass production (Tr. 66-69, 71-73, 84, 87-89, 95-96; L.F.158-160). They worked closely with both the customers and employees located in Emerson's plants to meet the customers' specifications (Tr. 24, 67, 72; L.F. 156, 158). Emerson's employees used the machinery at issue in connection with all of these activities (Tr. 76, 88, 92; L.F. 161-165).

Employees at the MTC also developed designs and concepts for new products for which Emerson had no specific customer. Emerson refers to these activities as "innovation" (L.F. 152; Tr. 25). About half of Emerson's innovation projects resulted in

3

the production of a finished product that was sold to a customer (Tr. 26). Innovation constitutes approximately ten percent of the activities conducted at the MTC (Tr. 22).

The MTC employees also engaged in "platform design" (Tr. 36). A platform is a generic motor style designed to meet a particular application, such as a swimming pool motor or an air conditioner motor (L.F. 152; Tr. 25, 36). A platform can be modified for specific customer needs (Tr. 26). Emerson actually produced and sold to customers approximately fifteen to twenty-five percent of the platform design projects (Tr. 26). The innovation and platform design activities at the MTC are not at issue in this case.

C. The Processes by Which Products are Manufactured for Specific Customers

Emerson produces customer-requested products through two different processes, referred to as "co-development" and "customization."

(i) The Co-Development Production Process

A co-development project is the development of a specific product for a specific application for a specific customer (L.F. 151; Tr. 37). Co-development projects constitute over thirty percent of the activities conducted at the MTC (Tr. 22; L.F. 152). Emerson's customers usually initiate the projects (L.F. 151; Tr. 24, 63-64). Upper management at Emerson must approve the project before the company begins work (Tr. 65). Although customers have on occasion decided not to order the product developed through this process, the goal of the co-development projects is to produce and sell a product that meets the customer's specifications (Tr. 74). Emerson would not engage in

3

these projects unless it was substantially certain the product would be purchased by the customer (Tr. 74).

During the period from 1995 to 1997, Emerson performed approximately six to twelve co-development projects (L.F. 151). Emerson presented evidence concerning one of its co-development projects (Tr. 58, L.F. 153). To protect the confidentiality and proprietary details of Emerson's business activities, Emerson's customer for this project is referred to in the record as "Customer A" (L.F. 153, n.1). The co-development project with Customer A was representative of Emerson's co-development projects during the tax periods at issue (Tr. 58; L.F. 153).

All three types of machines at issue in this case were integral to the codevelopment project with Customer A. In 1993, Customer A and Emerson began work on the co-development project to create a more efficient motor for Customer A's appliances (Tr. 61-63, Pet. Ex. 9, 10). Initially, Emerson and Customer A met many times and exchanged phone calls, and Emerson employees visited Customer A's site to determine Customer A's specifications (Tr. 60). Emerson then used a CAD system to design the motor (Tr. 66; L.F. 156). Emerson produced sample motors from the CAD design using the SLA machine (Tr. 67). As in all co-development projects, Emerson involved its plants in the design process to ensure that the plants were capable of producing the product (Tr. 67; L.F. 156). The plants tested and evaluated the sample motors, as did the customer and the engineers at the MTC, to determine if they met the required specifications (Tr. 68-69; L.F. 158).

Throughout the co-development process, Emerson used a dynamometer to test the product to ensure that it met the customer's specifications (Tr. 69-71; L.F. 158). After approval of the final sample, engineers created final drawings using a CAD system (Tr. 66, 71-72, 89; L.F. 158). Stored electronically, these drawings were accessible by Emerson's plants for use during the production of the motors (Tr. 72, 89; L.F. 158).

After the aforedescribed process, Emerson produced the first few hundred motors in a "pilot run" with the involvement of engineers at the MTC and employees at Emerson's plants (Tr. 72; L.F. 158). Emerson allowed the customer to examine these motors to ensure they met the customer's specifications (Tr. 72). Following the pilot run, Emerson prepared for mass production of the motors (Tr. 72). During mass production, the engineers at the MTC continued to provide the plant with drawings, materials, documentation and support (Tr. 72-73; L.F. 159). Design changes and improvements to the product continued throughout the mass production of the product (Tr. 72).

Emerson provided a price quote to Customer A for the products developed through the co-development project (Tr. 73). The prices were for the finished motors produced by Emerson (L.F. 159). There was no invoice or separate charge for the design of the product (Tr. 74).³

Emerson entered into other co-development projects that involved different terms of payment by Emerson's customers, including additional payment for engineering services (L.F. 156-158). Such payment arrangements, however, were not typical.

(ii) The Customization Production Process

Other customers specifically requested the customization of Emerson's existing motor designs (Tr. 84; L.F. 159). For example, a customer may order a motor from the standard catalog but have a feature changed, such as adding a larger shaft (Tr. 84). A customer could choose a motor from a standard catalog published by U.S. Electrical Motors ("USEM"), a division of Emerson, and request that the motor be modified to meet the customer's specifications (Tr. 81-84; Pet. Ex. 21, 22). These modifications could include features listed in the custom motor catalog, as well as other custom requests not reflected in that catalog (Tr. 84; Pet. Ex. 22). The customer initiated the customization projects by placing a purchase order with Emerson (Tr. 84-85). The purchase order for the custom motor included precise specifications (Tr. 84, 89; Pet. Ex. 23). The custom motor catalog listed prices for some of the products (Tr. 84). In other instances, the customer worked with Emerson to obtain a price quote for the product (L.F. 159; Tr. 84-85).

In customization projects, once a purchase order is received, Emerson's engineers used the CAD system to design parts and create drawings of the motor (Tr. 86-88). They transmitted the drawings to Emerson's plants electronically for production of the customized motor (Tr. 89). The customization projects did not take long to complete. A group of engineers could process forty to fifty orders per day (L.F. 159). The customer paid Emerson for the motor produced. Emerson's price was for the completed motor. Emerson did not charge separately for engineering or design services (Tr. 91; Pet. Ex. 26).

D. The Machinery

(i) The CAD System

In 1995, Emerson's USEM Division made a strategic decision to replace its existing CAD system with a new "more robust" modeling tool (L.F. 130, 164). The new equipment was a "Pro/Engineer" or "Pro/E" CAD system. Emerson purchased the system to enable Emerson to produce three-dimensional drawings as opposed to twodimensional drawings (Tr. 46; L.F. 130, 164). Emerson's goal in acquiring the new CAD system was to accelerate Emerson's new product development, improve engineering and product quality and increase the productivity of Emerson's engineers (L.F. 130, 165). Specifically, Emerson expected the new system to resolve problems Emerson had experienced with its 2-D CAD system, including manufacturing errors that contributed to scrap, rework and additional warranty costs (Pet. Ex. 27 at 7; L.F. 165). The new system was also expected to save time in creating motor shafts and to reduce the costs of castings and tooling (Ex. 27 at 14; L.F.165). Emerson purchased and installed the new CAD system, although Emerson continued to use its old CAD system, as well (Tr. 47; L.F. 165).

Emerson's engineers use the CAD system to produce detailed drawings of Emerson's products (Tr. 88; Pet. Ex. 28). These drawings are stored in electronic formats which employees in Emerson's plants use in production (Tr. 72, 89; L.F. 158). Employees can also print the drawings on paper (Tr. 88; Pet. Ex. 28). Emerson uses the CAD equipment extensively for projects involving the customization of products for its specific customers (Tr. 88). The CAD system is used seventy percent of the time for

customization projects (Tr. 88-89; L.F. 165). Emerson uses the system about ten percent of the time on co-development projects (Tr. 89; L.F. 165). The remaining use is for platform design projects (Tr. 89, L.F. 165).

(ii) The Stereolithography Machine ("SLA machine")

The SLA machine creates a three-dimensional plastic part that may be used in mechanical testing or in determining how a part will fit in an application (Tr. 29; L.F. 161; Pet. Ex. 4). For example, if a part is being designed for an appliance, the part produced by the SLA machine could be physically placed in the appliance to determine if it is the right size (Tr. 42, 43). This capability allows Emerson's engineers to resolve design problems early in the production process (Tr. 43). The plastic parts created by the SLA machine are also used to make molds that allow production of sample parts made of metal (Tr. 41, 67-69).

Engineers design the parts on a CAD system and transfer the design electronically to the SLA machine (L.F. 161). Using the design, the SLA machine directs a laser which hardens a plastic polymer one slice at a time into a three-dimensional plastic version of the part (Tr. 42; L.F. 161). In approximately fifty to seventy-five percent of Emerson's co-development projects, Emerson uses parts developed with the SLA machine (Tr. 29; L.F. 161).

The SLA machine made a significant difference in Emerson's production process. Prior to purchasing its first SLA machine, Emerson created three-dimensional samples from a block of aluminum, a very expensive process, and one that did not provide the detail of a part produced in the SLA machine (Tr. 40, 51). In some instances, in fact, it

was impossible to create a sample part (Tr. 40, 51). This sometimes caused Emerson to terminate the development of a motor (L.F. 161; Tr. 51-52).

Emerson purchased the SLA machine at issue in April 1995 to increase production at Emerson's SLA laboratory within the MTC (L.F. 160-161). In particular, this machine allowed production of larger parts that Emerson's USEM Division needed (L.F. 123, 126). It was intended to increase production of sample parts by 1,000 parts each year and to reduce the backlog in orders for parts (L.F. 123, 160-161). In addition, at the time it purchased the SLA machine, Emerson anticipated adding one employee to support the operations of the machine (L.F. 126). This purchase was in addition to SLA equipment that Emerson already owned (L.F. 162).

(iii) The Dynamometer

The dynamometer is a machine that measures the speed, horsepower, efficiency, starting torque, break-down torque and other parameters used in evaluating electric motors (Tr. 31, 95; L.F. 163). The dynamometer consists of a number of different components that Emerson purchased from May 1995 through July 1996 (L.F. 99, 163-164). Emerson purchased the dynamometer to test sample motors and to calibrate equipment used in Emerson's plants (Tr. 31, 91-92, 95; L.F. 162). Emerson uses the dynamometer to test motors to ensure that they meet standards set by the industry through the National Electrical Machine Association ("NEMA") and by the U.S. Department of Energy (L.F. 163; Tr. 31-32). Emerson also uses the dynamometer to ensure that the motors meet the standards set by Emerson's customers for motor performance, by testing motors that are in production at Emerson's plants (Tr. 93, 95; L.F. 163). Specifically,

Emerson brings customized motors from its production plants to the MTC to be tested on the dynamometer to determine whether the motors meet Emerson's customers' specifications, the U.S. Department of Energy standards, and the standards set for electric motors by organizations such as the National Electric Machine Association (Tr. 31-32, 92, 95). The dynamometer is used about fifteen percent of the time to produce products through the customization process for Emerson customers (Tr. 94-95; L.F. 164).

The dynamometer allows Emerson's engineers to test and evaluate new designs and improvements to its manufacturing processes (L.F. 112, 163). It provides "reliable and repetitive test data" that enables "fine tuning of Emerson's performance program which in turn provide[s] greater efficiency of its products" (L.F. 112, 163). The dynamometer did not replace an existing dynamometer, but added to the MTC's capacity in this area (L.F. 164; Tr. 91-92). This dynamometer also allows Emerson to perform new types of testing (L.F. 163). In particular, by adding the dynamometer, Emerson gained the capability of certifying that its products meet Department of Energy efficiency levels (L.F. 163).

3

STATEMENT OF THE ISSUE

Section 144.030.2(5) provides an exemption from sales and use tax for "machinery and equipment . . . purchased and used to establish new or expand existing manufacturing . . . plants in the state if such machinery and equipment is used directly in manufacturing . . . a product which is intended to be sold ultimately for final use or consumption." Emerson purchased machinery to expand the MTC which is located in Missouri. Emerson's use of the machinery constituted an essential and integral part of Emerson's production of electric motors for its customers. Is Emerson's purchase of the machinery exempt under Section 144.030.2(5)?

3

STANDARD OF REVIEW

The decision of the Commission shall be reversed if: (1) it is not authorized by law; (2) it is not supported by competent and substantial evidences; (3) a mandatory procedural safeguard is violated; or (4) it is clearly contrary to the reasonable expectations of the general assembly. Section 621.193; *Concord Publishing House, Inc. v. Director of Revenue*, 916 S.W.2d 186 (Mo. banc 1996). This Court's review of the law is *de novo*. *Zip Mail Services, Inc. v. Director of Revenue*, 16 S.W.3d 588, 590 (Mo. banc 2000). Because Section 144.030.2(5) is an exemption, it is to be construed strictly, but reasonably, against the taxpayer. *Iron County v. State Tax Commission*, 437 S.W.2d 665, 668 (Mo. banc 1968).

3

POINT RELIED ON

THE ADMINISTRATIVE HEARING COMMISSION ERRED IN RULING
THAT THE CAD SYSTEM, THE STEREOLITHOGRAPHY MACHINE, AND
THE DYNAMOMETER ARE NOT EXEMPT UNDER SECTION 144.030.2(5)
BECAUSE THESE THREE MACHINES:

- (1) WERE USED DIRECTLY IN MANUFACTURING A PRODUCT
 INTENDED TO BE SOLD ULTIMATELY FOR FINAL USE OR
 CONSUMPTION, IN THAT THEY WERE USED BY APPELLANT IN
 CREATING DESIGNS, DRAWINGS, PLANS AND PROTOTYPES OF MOTORS,
 AND IN TESTING AND IMPROVING THE DESIGN OF PRODUCTS DURING
 PRODUCTION, ALL OF WHICH WERE ESSENTIAL AND INTEGRAL PARTS
 OF THE PROCESS OF MANUFACTURING PRODUCTS FOR APPELLANT'S
 CUSTOMERS; AND
- (2) WERE PURCHASED AND USED TO EXPAND APPELLANT'S MANUFACTURING PLANT IN THE STATE, IN THAT THEY EXPANDED PRODUCTION AT APPELLANT'S MTC WHICH IS A PART OF APPELLANT'S MANUFACTURING PLANT, AND INCREASED APPELLANT'S PRODUCTION OF PRODUCTS SOLD FOR FINAL USE OR CONSUMPTION.

Concord Publishing House, Inc. v. Director of Revenue, 916 S.W.2d 186 (Mo. banc 1996);

3

Floyd Charcoal Co. v. Director of Revenue, 599 S.W.2d 173 (Mo. 1980);

Noranda Aluminum, Inc. v. Department of Revenue, 599 S.W.2d 1 (Mo. 1980);

DST Systems v. Director of Revenue, 43 S.W.3d 799 (Mo. banc 2001);

Section 144.030.2(5);

Section 144.615(3);

12 CSR 10-111.010;

12 CSR 10-103.600.

SL01DOCS\2315789.7

3

ARGUMENT

THE ADMINISTRATIVE HEARING COMMISSION ERRED IN RULING THAT
THE CAD SYSTEM, THE STEREOLITHOGRAPHY MACHINE, AND THE
DYNAMOMETER ARE NOT EXEMPT UNDER SECTION 144.030.2(5)
BECAUSE THESE THREE MACHINES:

- (1) WERE USED DIRECTLY IN MANUFACTURING A PRODUCT
 INTENDED TO BE SOLD ULTIMATELY FOR FINAL USE OR
 CONSUMPTION, IN THAT THEY WERE USED BY APPELLANT IN
 CREATING DESIGNS, DRAWINGS, PLANS AND PROTOTYPES OF MOTORS,
 AND IN TESTING AND IMPROVING THE DESIGN OF PRODUCTS DURING
 PRODUCTION, ALL OF WHICH WERE ESSENTIAL AND INTEGRAL PARTS
 OF THE PROCESS OF MANUFACTURING PRODUCTS FOR APPELLANT'S
 CUSTOMERS; AND
- (2) WERE PURCHASED AND USED TO EXPAND APPELLANT'S

 MANUFACTURING PLANT IN THE STATE, IN THAT THEY EXPANDED

 PRODUCTION AT APPELLANT'S MTC WHICH IS A PART OF

 APPELLANT'S MANUFACTURING PLANT, AND INCREASED

 APPELLANT'S PRODUCTION OF PRODUCTS SOLD FOR FINAL USE OR

 CONSUMPTION.

3

1. The Machinery was Used Directly in Manufacturing

A. Introduction

The narrow issue in this case is whether Emerson uses the CAD system, the SLA machine and the dynamometer in an essential and integral part of its production of products, making Emerson's purchase of the three machines exempt under Section 144.030.2(5). This section provides an exemption from Missouri sales tax for (1) "machinery and equipment" (2) "purchased and used to establish new or expand existing manufacturing . . . plants in this state" (3) "if such machinery and equipment is used directly in manufacturing" (4) "a product intended to be sold ultimately for final use or consumption." Section 144.615(3) makes this exemption applicable to the use tax.

There is no dispute that Emerson is a manufacturer of electric motors, and that the motors are a "product intended to be sold ultimately for final use or consumption." The parties also agree that the three items at issue in this case all qualify as "machinery" within the meaning of this exemption. Thus, elements (1) and (4) of the exemption are not in dispute. The Commission also made findings that support the conclusion that Emerson's purchases expanded its existing manufacturing plant, thereby satisfying element (2) of the exemption.

In dispute is whether the three machines were used "directly" in Emerson's manufacturing processes. The Commission concluded that the CAD system was used in "engineering design" which it found was separate from the manufacturing process. With respect to the SLA machine and the dynamometer, the Commission found that Emerson used these machines in "research and development" activities, not manufacturing.

The Commission's decision is erroneous. The decision disregards this Court's precedent concerning the scope of the manufacturing exemptions, which hold that the term "directly" as used in Section 144.030.2(5) includes steps which are integral and essential to the manufacturing process even when they are separate from the actual transformation of raw materials into a product. See Concord Publishing House, Inc. v. Director of Revenue, 916 S.W.2d 186 (Mo. banc 1996); Floyd Charcoal Co. v. Director of Revenue, 599 S.W.2d 173 (Mo. 1980); Noranda Aluminum, Inc. v. Department of Revenue, 599 S.W.2d 1 (Mo. 1980); and DST Systems v. Director of Revenue, 43 S.W.3d 799 (Mo. banc 2001). In this case, the CAD system, the SLA machine and the dynamometer were used to create, perfect and test both the design and performance of motors which specific customers requested and which Emerson manufactured on a custom basis. Under the facts of this case, the creation and perfection of the design of the product is essential to and an integral part of manufacturing within the meaning of this Court's decisions. The Commission's decision to the contrary, which relied on opinions from other states, a decision of the Missouri Court of Appeals, and statutes other than Section 144.030.2(5) and made no real attempt to distinguish the clear holdings of this Court, should be reversed.

B. The "Integrated Plant Doctrine"

For purposes of Section 144.030.2(5) and other sales and use tax exemptions "[m]anufacturing consists of the alteration or physical change of an object or material in such a way that produces an article with a use, identity, and value different from the use,

identity and value of the original." *Galamet, Inc. v. Director of Revenue*, 915 S.W.2d 331, 333 (Mo. banc 1996).

In determining whether machinery is "used **directly** in manufacturing" within the meaning of Section 144.030.2(5), this Court applies the "integrated plant" doctrine. *Floyd Charcoal Co. v. Director of Revenue*, 599 S.W.2d 173 (Mo. 1980); *Noranda Aluminum, Inc. v. Department of Revenue*, 599 S.W.2d 1 (Mo. 1980). By adopting this approach, this Court rejected the "stricter view" taken by some courts in other jurisdictions that manufacturing exemptions must be limited to "machinery and equipment which perform a function involving a change of the raw material involved into the finished product." *Floyd* at 176. Instead, this Court has concluded that "[m]odern manufacturing facilities are designed to operate on an integrated basis" and "to limit the exemption to those items of machinery or equipment which produce a change in the composition of the raw materials involved in the manufacturing process would ignore the essential contribution of the devices required for such operation." *Floyd* at 178.

In *Floyd* this Court cited *Niagara Mohawk Power Corp. v. Wanamaker*, 286 App. Div. 446, 144 N.Y.S.2d 458 (1955), which explains that the pertinent questions in analyzing the applicability of the exemption are:

- (1) Is the disputed item necessary to production?
- (2) How close, physically and causally, is the disputed item to the finished product?
- (3) Does the disputed item operate harmoniously with the admittedly exempt machinery to make an integrated and synchronized system?

Floyd at 177. Using this framework, this Court concluded that a system of conveyors and storage bins that removed starch from railroad cars, stored the starch, and then conveyed it to the processing area was "used directly in manufacturing" charcoal briquettes. This Court found that the starch system "contributes to the continuous flow process employed by" the company, and "that process requires the starch system."

Similarly, equipment that Floyd used to weigh and sack the finished briquettes was "an integral part of [the company's] manufacturing process." In so holding, the Court rejected the Director's contention that these items fell outside of the manufacturing process since the starch system was used **before** production of the product began, and the weighing and sacking equipment were not used until **after** the manufacturing process was complete.

On the same day that this Court handed down *Floyd*, it also issued its decision in *Noranda*, affirming its approval of the integrated plant approach, and noting that it is "consistent with the ...legislative intent behind the exemption." *Noranda* at 4 (quoting *Floyd*). The taxpayer in *Noranda* manufactured aluminum. The machinery and equipment at issue included items that were used to make "carbon anodes." Noranda used the anodes on the aluminum production line to conduct an electrical current through aluminum oxide, the raw material used to produce the aluminum. The anodes had to be replaced on a regular basis. Noranda manufactured them in a building separate from the aluminum production area. This Court stated, "it is clear that the items" used in producing anodes "are used in steps or operations that are **essential to and comprise an integral part** of Noranda's manufacturing process, and are 'used directly for

manufacturing or fabricating a product' as that term is used in §144.030." *Id.* (Emphasis added). Also at issue in *Noranda* was equipment used in a laboratory, also housed in a separate building, to test samples of the aluminum for impurities. This Court held that equipment "essential to and a part of the manufacturing process of the aluminum." *Id.*

Consistent with this approach, this Court in *Concord Publishing House, Inc. v.*Director of Revenue, 916 S.W.2d 186 (Mo. banc 1996), held that computer equipment used in the production of a newspaper was "directly used" to manufacture the newspaper, notwithstanding the fact that the equipment was owned by a separate corporation and was physically separated from the printing press where the newspaper was printed. *Concord* at 192, 193. Some of the computer equipment was used for "composition and editing" of the newspaper's contents, "the most important step in manufacturing a newspaper." *Id.* at 192. This Court explained that "the composition and editing process is as essential to the manufacturing of a newspaper as the printing press, regardless of whether it is located in the same building or across town." *Id.* This Court also allowed the exemption for laptop

Although Section 144.030.2(5) has been amended since the *Noranda* decision, the statutory language the Court interpreted in *Noranda* was identical in all pertinent respects to the language of the current version of the statute that is at issue in this case. It provided a sales tax exemption for "Machinery and equipment purchased and used to establish new or expand existing manufacturing . . . plants in the state if such machinery is used directly in manufacturing . . . a product which is intended to be sold for final use or consumption."

computers used "to record information" that later became a part of the newspaper's content. Recording information "is part of the manufacturing process as well" because "[r]ecording is the first step in processing words into a newspaper." This Court noted that "the laptop computers not only record information but allow for its immediate editing, even in the field." The laptops "extend [the newspaper's] editing process to locations where news events occur, speeding up the editing process."

Later, in *DST Systems v. Director of Revenue*, 43 S.W.3d 799 (Mo. banc 2001), this Court allowed the manufacturing equipment exemption for computers that were purchased by a company that performed accounting and transfer agent functions in connection with some fifty million mutual fund accounts. The computers at issue were used by DST to process and store the information associated with these accounts. A separate company, located in a separate location, also used the computers in the production of printed reports. The parties agreed that the printed reports were "products produced and sold to the ultimate consumer." *DST* at 803. The issue in the case was whether the computers were "used directly in manufacturing" the reports. *Id.*

Following the analysis of *Noranda* and *Concord*, this Court noted that "[t]hough the computers and other equipment at the [computer] facility are not used exclusively for manufacture of the [printed] products in question, they are substantially so used. They also are an integral part in producing the ultimate product." *Id.* This Court added that "[t]he fact that the printing and the gathering [of information] occur at different sites does not cause the equipment and machinery to fail to be 'used directly in manufacturing." *Id.*

3

Most recently, this Court in *Southwestern Bell Telephone Company v. Director of Revenue*, 182 S.W.3d 226, 233 (Mo. banc 2005), explained:

The [integrated plant] doctrine requires examination of location and ownership to the extent that it asks in its second prong, 'How close, physically and causally, is the disputed item to the finished product?'

Nothing in this question requires the claimed machinery and equipment to be located in the same building or to have common ownership to qualify for the exemption. (Emphasis added).

In sum, this Court's longstanding interpretation of Section 144.030.2(5) allows the manufacturing equipment exemption for items that are used before the actual transformation of raw materials into a finished product begins, and for items that are in a different location from the manufacturer's production line. The key is whether the machinery is used in a process that is "essential to" and an "integral part of" the manufacturing process.

- C. The Machinery was Used Directly in Manufacturing
 - (i) Design and Testing Activities are an Integral Part of

 Manufacturing

In the instant case, Emerson's use of the CAD System, the SLA machine and the dynamometer at the MTC falls squarely within the exemption. They are used directly in manufacturing. A "continuous flow" of activities links the use of these machines with the rest of the manufacturing process. The manufacturing process begins when a customer comes to Emerson with a specific request for a specific product and initiates a

3

co-development or customization project. The engineers at the MTC work in conjunction with the customer and with Emerson's production plants in a process that ultimately results in the production of the electric motor the customer has requested. In addition to meeting the customer's specifications, the electric motors Emerson manufactures must meet precise standards set by the National Electrical Machine Association and the U.S. Department of Energy (Tr. 31-32, 95-96; L.F. 163). Because of these precise specifications, the production of the motors must include detailed design and testing before and during production (Tr. 92-93, 95; L.F. 163). As with the composition and editing stage of a newspaper, plans and designs created at the MTC using the SLA machine and the CAD system, and the testing and measuring of performance by the dynamometer are "the most important step[s] in manufacturing" an electric motor because without them, Emerson's production plants would be unable to create parts and assemble them with accuracy and efficiency into the complex products requested by the customers. Concord at 192.

(ii) The CAD System

Emerson's engineers use the CAD system to create three-dimensional drawings of the motors requested by Emerson's customers. Emerson conducts the design work in conjunction with the customers and Emerson's production plants, to ensure that the customer's specifications are met and that the plants will be capable of producing the product as designed. Emerson employees at the production plants directly use the drawings created and produced at the MTC; they are accessible at the plant in electronic format (Tr. 72, 89). The drawings tell the employees at the plant "how to build the

motors" and thus guide the entire production process (Tr. 72). Indeed, Emerson's old CAD system caused manufacturing errors that contributed to scrap, rework and additional warranty costs. Emerson bought the new system to solve these production problems (L.F. 165; Pet. Ex. 27 at 7). Without the CAD system's ability to produce precise drawings, Emerson would be unable to manufacture motors that meet its customers' specifications. The CAD system is thus an essential and integral part of Emerson's manufacturing processes.

(iii) The SLA Machine

The SLA machine creates an actual model of the design that engineers produce using the CAD system. Using a laser that transforms a liquid polymer into hardened plastic, this machine creates highly detailed sample parts that are indispensable in creating Emerson's products. Emerson uses the plastic parts to test and to determine whether the design, as drawn on the CAD system, will actually work and fit where it is needed in the customer's application. This capability allows Emerson's engineers to resolve design problems early in the production process (Tr. 43). For example, if the engineers design a part to fit in an appliance, the engineers and the customer can physically place the SLA-produced part in the appliance to ensure that it will fit (Tr. 42, 43). Emerson also uses the plastic parts to make molds for metal parts (Tr. 41, 67-69). The importance of this machine to Emerson's production process is confirmed by the fact that before it had an SLA machine, Emerson was not always able to produce sample parts, and, in some cases, this inability prevented Emerson from continuing production of a product (Tr. 51-52; L.F.161). The SLA machine thus directly affects the

3

precision and efficiency of Emerson's production processes. It is, therefore, essential and integral to Emerson's production of electric motors for Emerson's customers.

(iv) The Dynamometer

The dynamometer is a testing device. It measures the speed, horsepower, efficiency and other parameters used in evaluating electric motors (Tr. 31, 95; L.F. 163). The testing Emerson performs using the dynamometer is also necessary to certify Department of Energy efficiency levels for Emerson's products (L.F. 163). To ensure that the customer's exact specifications are met, the dynamometer measures all of the performance parameters of the motors throughout the manufacturing process. The engineers at the MTC use the test results to refine their designs and to address design problems before and during mass production of the engines. The record shows that Emerson uses the dynamometer to test sample motors and motors in production at its plants, and to calibrate testing equipment at its plants (Tr. 31-32, 91-92, 95). All of these activities are integral and essential parts of manufacturing Emerson's products.

The Commission found that only testing motors in mass production at Emerson's plants and calibrating test equipment were part of manufacturing. The Commission relied upon the erroneous distinction it drew between design and manufacturing in this case to conclude that testing the sample motors which Emerson custom-made for its customer is not an integral part of manufacturing (L.F. 182). It then determined that the use of the dynamometer for mass production testing and calibration was incidental (L.F. 182).

Under the plain language of Section 144.030.2(5), there is no threshold usage requirement to qualify for the exemption. Emerson is entitled to the exemption based solely on its use of the dynamometer for testing motors from its plants and for calibrating equipment at its plants. This use of the dynamometer is on all fours with the laboratory equipment that was found exempt in *Noranda*. *See Noranda* at 4. Even the Commission agrees that both of these activities are an integral and essential part of Emerson's manufacturing processes (L.F. 181). Accordingly, the dynamometer should not be subject to tax.

In the alternative, and assuming *arguendo* that Section 144.030.2(5) imposes a requirement that the use of machinery for exempt purposes be more than incidental, Emerson's use of the dynamometer satisfies any such requirement. The dynamometer was used approximately fifteen percent of the time to modify existing platform motors (L.F. 164). Accordingly, about fifteen percent of the time the dynamometer was testing products that Emerson's customers had custom-ordered and that were in the process of being manufactured (Tr. 94-95). This use of the dynamometer, coupled with the testing of mass production motors and calibration of plant equipment that even the Commission concedes is exempt, clearly was more than incidental. The Commission's finding therefore should be reversed.

(v) All of the Machinery is Essential and Integral to Manufacturing

Each process described above that Emerson performs with these three machines is essential to and integrated with the process of manufacturing motors that Emerson's

customers have requested. The manufacture of Emerson's motors requires application of complex engineering skills and the use of highly technical equipment. The machines at issue create, perfect and test both the design and performance of motors that Emerson is manufacturing on a custom basis for specific customers. Design is clearly part of the "continuous flow" of manufacturing; it is necessary to and in fact immediately precedes actual manufacturing in the chain of processes that constitute the production of a product. Just as recording information on a laptop is essential to the production of a newspaper and positioning starch is essential to making briquettes, designing and perfecting the design of custom-ordered motors is essential and integral to the manufacture of those motors. Concord Publishing House, Inc., supra; Floyd Charcoal Co., supra. The Commission's decision to the contrary never even attempts to distinguish the numerous decisions of this Court holding that processes similar to design were directly used in manufacturing for purposes of Section 144.030.2(5). Furthermore, the fact that these activities take place in the MTC, rather than at the production facilities, does not change their status for purposes of Section 144.030.2(5). Southwestern Bell Telephone Company, supra. They are an essential and integral part of the manufacturing process.

D. The Director's Regulation Confirms that the Machinery isExempt

The Director's regulation interpreting the manufacturing machinery and equipment exemptions confirms that the activities Emerson performs at the MTC, and in particular the use of the dynamometer, are an integral part of the manufacturing process.

12 CSR 10-111.010(4)(F) includes the following example:

A manufacturing company purchases various pieces of testing equipment for different purposes, including: i) to ensure that the seller's product meets the tolerances claimed in its marketing literature, ii) to meet the customers' specification requirements mandated by the sales agreement, and iii) to perform research and development on potential future products. The testing equipment for the first two (2) situations are directly used to manufacture a product intended to be sold ultimately for final use or consumption and would qualify for the exemption. The testing equipment for research and development is not directly used in manufacturing a product intended to be sold ultimately at retail and, therefore, would not qualify for the exemption. (Emphasis added).

The regulation applies here. Emerson, in developing and testing products at the MTC for specific customers pursuant to co-development agreements and customization projects, uses all three of the machines at issue to ensure that the products will meet the specifications Emerson's customers have set. The dynamometer, furthermore, is used to test the motors' speed, horsepower, efficiency, starting torque, break-down torque and other parameters (Tr. 31, 95; L.F. 163). It is precisely the type of equipment contemplated by this regulation.

E. "Research and Development" In this Case is an Integral Part ofManufacturing Specific Products for Specific Customers

Contrary to the Commission's characterization of Emerson's case, Emerson is not asking and has never asked this Court to hold that the manufacturing equipment exemption applies to all research and development activities in this state. The manufacturing machinery and equipment regulation discussed above correctly excludes from the exemption equipment used in "research and development on **potential future products**." 12 CSR 10-111.010(4)(F) (Emphasis added). Emerson's development of specific products for specific customers, however, is an integral part of manufacturing the specific products, where development is initiated by the customer. As such, it is "research and development," but within the scope of "manufacturing" activities for purposes of Section 144.030.2(5).

With a broad brush, the Commission concluded that "research and development" cannot be part of manufacturing, and in so doing, disregarded this Court's precedent concerning the scope of the manufacturing exemption (L.F. 170, 178). The Commission noted, for example, Section 135.100(11), which defines the term "revenue producing enterprise," for purposes of the Missouri income tax credit for expanded business facilities, as including: "[m]anufacturing activities classified as SICs 20 through 39" and "[r]esearch and development activities classified as SIC 873, except 8733." (*See* L.F. 169 n.5). Because "research and development" and "manufacturing" are listed separately in that statute, the Commission apparently concludes that they must be distinct and mutually exclusive terms for the purpose of interpreting Section 144.030.2(5). This

supposed distinction has no application to this case. In the first place, Emerson is not claiming an exemption based on the use of the machines for general "research and development" but rather for their use in the design of specific products for specific customers. Second, Emerson has never argued that design and manufacture are the same but only that design is an essential and integral part of the manufacturing process within the meaning of such cases as *Floyd Charcoal*, *supra*, and *Noranda*, *supra*.

Also in disregard of this Court's precedent, the Commission cites the decision of the Missouri Court of Appeals in *Mid-America Dairymen, Inc. v. Payne*, 990 S.W.2d 648 (Mo. App. S.D. 1999), as highlighting "an important distinction between manufacturing and product development" (L.F. 170). In that case, the Court of Appeals concluded that the taxpayer's product development and quality testing activities were not "manufacturing" within the meaning of an ad valorem tax exemption applicable to facilities located in enterprise zones. The Court of Appeals expressly rejected the suggestion that it should apply the "integrated plant" approach in interpreting the term "manufacturing" as used in the statute at issue in that case. Instead, the Court of Appeals concluded that it was required to interpret the term "manufacturing" more narrowly. It focused not on the "business entity as a whole" (as this Court has done in applying Section 144.030.2(5)) but exclusively on "the specific facility or specific improvement to the property" at issue.

In sum, the Commission's reliance on both Section 135.100 and *Mid-America*Dairymen, ignores this Court's teachings on the subject of machinery directly used in

manufacturing. It also ignores, in significant part, the Director's own regulation. For these reasons, the decision must be reversed.

Emerson is not claiming that general research and development activities not related to the production of a specific product would qualify for the manufacturing exemption under Section 144.030.2(5). That would be contrary to the purposes of the exemption, which are: "to encourage the production of items ultimately subject to sales tax and to encourage the location and expansion of industry in Missouri." *Concord* at 190 (citing *Bridge Data Co. v. Director of Revenue*, 794 S.W.2d 204, 206 (Mo. banc 1990); *State ex rel. Ozark Lead Co. v. Goldberg*, 610 S.W.2d 954, 957 (Mo. 1981); *Floyd Charcoal Co., supra*; *Heidelberg Central, Inc. v. Director of Revenue*, 476 S.W.2d 502, 506 (Mo. 1972); and *West Lake Quarry & Material Co. v. Schaffner*, 451 S.W.2d 140, 142 (Mo. 1970)).

The decisions of neighboring states' courts allow manufacturing exemptions under circumstances similar to this case. For example, in *Pledger v. EASCO Hand Tools, Inc.*, 304 Ark. 47, 800 S.W.2d 690, 691 (Ark. 1990), the Supreme Court of Arkansas upheld a trial court decision that a CAD system "performed an essential function directly in the manufacture of tools" and was therefore exempt from sales tax. In *United Design Corporation v. Oklahoma Tax Commission*, 1997 OK 43, 942 P.2d 725 (Okla. 1997), the Supreme Court of Oklahoma ruled that design, development and creation of a prototype were all "critical steps" in the process of manufacturing figurines. The Court stated that the company's "manufacturing operation is one integrated production process. That process includes any necessary adjunct to production." The Oklahoma Court of Appeals,

citing this Court's decision in *Concord*, *supra*, and *Bridge Data v. Director of Revenue*, 794 S.W.2d 204 (Mo. banc 1990), ruled that the production of tax and accounting software was manufacturing. *Tax and Accounting Software v. Oklahoma Tax Commission*, OK Tax Rep. (CCH) ¶ 200-796 (Okla. Ct. App. Feb. 25, 1997) (Appendix A45-51). The Court rejected the Tax Commission's argument that the writing of code to produce the software was "research and development." Instead, it found that writing the code was "the essence of manufacturing." *Id*.

The Commission's sweeping rejection of research and development machinery as being used directly in manufacturing is out of sync with this Court's enlightened understanding of manufacturing in the Twenty-First Century.

F. The True Object Test Demonstrates that the Machinery was Used Directly in Manufacturing

In *Concord*, this Court enunciated an additional test for determining what activities are an integral part of the manufacturing process. In determining that the exemption provided by Section 144.030.2(5) applied to computer equipment used in producing a newspaper, the Court observed:

Notably, the Department of Revenue requires printing businesses to collect sales tax on publications, catalogues, leaflets, etc. they print, but does not allow a deduction for preparing copy or artwork that may be included in the final charge. 12 CSR 10-3.348. If the department includes design charges in calculating sales tax as if it were the sale of manufactured, tangible personal property and

not a service, then companies should be allowed to claim manufacturing exemptions on the equipment used in designing or formatting the printed material.

Concord at n.6. (Emphasis added). In other words, services that must be included in the taxable sales price of a product are an integral part of the production of that product. It follows that machinery used to perform these services should be exempt.

12 CSR 10-103.600, which explains the "true object test," sets out the test for determining when a service must be included as a part of the taxable price of tangible personal property. This regulation provides in pertinent part:

(1) In general . . . [w]hen the sale of tangible personal property and a nontaxable service are not separable, the entire sale price is taxable if the true object of the transaction is the transfer of tangible personal property.

* * *

(2) Definition of Terms.

* * *

(C) True object—the real object the buyer seeks in making the purchase. The essentials of the transaction determine the true object.

The true object of the transaction is the tangible personal property if:

1. The purchaser desires and uses the tangible personal property;

- 2. The tangible medium is not merely a disposable conduit for the service or intangible personal property;
 - 3. The tangible personal property is a finished product; or
- 4. The tangible personal property is not separable from the service or intangible personal property.

* * *

- (4) Examples
- (A) A steel fabricator enters into an agreement to fabricate steel beams for a building. The fabricator makes a retail sale of the steel beams. Even though the fabrication labor is separately stated on the sales invoice, the total sale price including charges for the fabrication labor is subject to tax.

* * *

(H) A tool and die manufacturer designs and builds a custom machine tool for a customer. The tool will be installed on the customer's existing equipment. The manufacturer purchases from an independent mechanical engineer shop drawings showing how to build the tool and showing precisely how and where the tool should be installed on the customer's equipment. The manufacturer's agreement with its customer requires that the drawings be provided to the customer along with the tool. The entire purchase price paid by the manufacturer's customer, including the cost of the shop

drawings (even if separately stated) is subject to tax. The transfer of the drawings is a part of the sale of the tool.

Under this regulation, charges for services performed in connection with the sale of tangible personal property are subject to tax, so long as the property and not the service is the "true object" of the sale. *See Sneary v. Director of Revenue*, 865 S.W.2d 342 (Mo. banc 1993).

The Commission did not "find . . . cases [applying the "true object test"] very helpful because the issue in this case is not whether a transaction is a sale of tangible personal property or a service" (L.F. 174). This observation misses the point. The "true object test" is used to determine whether services are included in the taxable sale price of tangible personal property. Under *Concord*, if property is the true object of a sale, the equipment used in performing the services that are a part of the sale of the property is exempt from tax.

In the instant case, Emerson's customers pay Emerson for finished products—the electric motors. In most instances, there is no separate charge for engineering services. Even where there is a separate charge for the services, the services are not separable from the final finished product. Under the Director's regulation, the "true object" of these sales is the motor. The design and testing services are not the true object of the sale. It follows then, that the full price of the motors are subject to tax (if the motors are sold at retail in a transaction that is not otherwise exempt from tax) with no deduction for the cost of design services. As example (H) of the Director's regulation demonstrates: there is no way around collecting tax on the full price of the product—even if Emerson were to

pay a third party for design services and charge its customers a separate price for the drawings, Emerson would still be required to include the design charges in its taxable amount. Because any charges attributable to the design services must be included in the taxable price of Emerson's products, *Concord* directs that Emerson "should be allowed to claim manufacturing exemptions on the equipment used" to perform these services. *Concord* at n. 6.

In addition to dismissing the true object test, the Commission decided that "[e]ngineering design services are separate from, and preliminary to, manufacturing" and added, "[w]e do not agree that the design is an integral part of the manufacturing process itself," noting that the CAD system "is not physically close to the finished product" (L.F. 177). Physical proximity is not relevant here. First, the evidence is that the CAD performs functions that are integrated and synchronized with the production at the plants. Second, this Court has said in *Concord, DST* and *Southwestern Bell Telephone* that physical proximity does not defeat the application of this exemption. In sum, the true object test, which the Commission expressly refused to consider in this case, compels a decision that Emerson's design activities are in fact "an integral part of the manufacturing process itself" (L.F. 177). As such, the machinery used to perform these services should be deemed exempt from use tax.

G. The Machinery was Used for Plant Expansion

The Commission did not reach the issue of whether Emerson's machinery expanded its plant, as required by Section 144.030.2(5). While the Commission stated that Emerson had not presented "direct" evidence of plant expansion, the Commission

added that it could "infer that the items at issue in this case increased the production capacity of Emerson's plants" (L.F. 183). For the reasons explained below, the record in this case supports the Commission's inference. Emerson's purchase of the machines at issue in this case expanded its plant within the meaning of Section 144.030.2(5).

To demonstrate "plant expansion" a taxpayer may adduce evidence of the physical expansion of its production facility, or may show that the purchases increased the taxpayer's production volume. *Concord* at 191. The Director's regulation further states that this requirement is met by equipment purchases "that result in an actual or potential: i) increase in production volume at the plant, ii) increase in employment at the plant, or iii) increase in the number of types or models of products produced at the plant." 12 CSR 10-111.010(2)(B).

Emerson presented evidence, which the Commission adopted in its findings of fact, that Emerson's purchases of the CAD system, dynamometer and SLA machine increased its production volume at the MTC. All of these machines were in addition to existing machinery, and all allowed increased production of plans, designs, prototypes and consequently—finished products. With respect to the SLA machine, the evidence was that it was intended to increase production of sample parts by 1,000 parts each year, as well as reduce an existing backlog in orders for parts (L.F. 123, 160-161). In addition, at the time of purchase of the SLA machine, Emerson anticipated adding an employee to support its operations (L.F. 126). The evidence also shows the dynamometer increased Emerson's efficiency, and added to the capacity of the MTC to test sample motors and motors from Emerson's plants. By adding this machine, Emerson gained the capability

of certifying that its products met Department of Energy efficiency levels (L.F. 163). Emerson purchased the CAD system for the purpose of accelerating new product development, improving engineering and product quality, and increasing the productivity of Emerson's engineers. By reducing errors in production caused by drawings produced with it old system, it was Emerson's goal to increase production with the new CAD system (L.F. 130, 165). Like the other purchases, this system was in addition to Emerson's existing equipment, and added to the MTC's production capacity. The MTC was a part of Emerson's "integrated plant." As the Commission found, it is reasonable to infer from this evidence that these purchases resulted in increased production at Emerson's other plants. For these reasons, Emerson has demonstrated that the purchases were for plant expansion purposes.

CONCLUSION

As demonstrated by the foregoing, the decision of the Administrative Hearing Commission in this case is not authorized by law and creates a result that is clearly contrary to the reasonable expectations of the general assembly. Accordingly the decision of the Commission should be reversed and this Court should enter a decision:

(1) granting the refunds requested with respect to Emerson's purchase of the CAD system and SLA machine; and (2) abating in full the assessment issued with respect to Emerson's purchase of the dynamometer.

Respectfully submitted,

BRYAN CAVE LLP

Ann K. Covington, #26619 Brenda L. Talent, #35568 One Metropolitan Square 211 N. Broadway, Suite 3600 St. Louis, Missouri 63102 akcovington@bryancave.com brenda.talent@bryancave.com Telephone: 314-259-2000

Facsimile: 314-259-2000

Carole L. Iles, #33821 221 Bolivar Street, Suite 101 Jefferson City, MO 65101 carole.iles@bryancave.com Telephone: (573) 556-6622 Facsimile: (573) 556-6630

CERTIFICATE OF SERVICE AND COMPLIANCE

I hereby certify that one true and accurate copy of the foregoing, as well as a labeled disk containing the same, were hand-delivered this 31st day of March, 2006, to:

Alana Barragan-Scott
Deputy State Solicitor
Missouri Attorney General's Office
Supreme Court Building
207 West High Street, 8th Floor
Jefferson City, Missouri 65101

James L. Spradlin Senior Counsel Missouri Department of Revenue Truman State Office Bldg. 301 West High, Room 670 P.O. Box 475 Jefferson City, MO 65105-0475

Susana J. Coronado Emerson Electric Co. 8000 W. Florissant Avenue P.O. Box 4100 St. Louis, MO 63136-8506

I hereby further certify that the foregoing brief complies with Rule 55.03 and with the limitations contained in Rule 84.06(b), in that it contains 10,160 words.

I hereby further certify that the labeled disk, simultaneously filed with the hard copies of the briefs, has been scanned for viruses and is virus-free.

IN THE SUPREME COURT OF MISSOURI

No. SC87146

EMERSON ELECTRIC CO., Appellant,

v.

DIRECTOR OF REVENUE, Respondent.

ON PETITION FOR REVIEW FROM THE MISSOURI ADMINISTRATIVE HEARING COMMISSION THE HONORABLE KAREN A. WINN, COMMISSIONER

APPELLANT'S APPENDIX

Ann K. Covington, #26619 Brenda L. Talent, #35568 **One Metropolitan Square** 211 N. Broadway, Suite 3600 St. Louis, Missouri 63102 akcovington@bryancave.com

BRYAN CAVE LLP

brenda.talent@brvancave.com

Telephone: 314-259-2000 Facsimile: 314-259-2020

Carole L. Iles, #33821 221 Bolivar Street, Suite 101 Jefferson City, MO 65101 carole.iles@bryancave.com **Telephone: (573) 556-6622**

Facsimile: (573) 556-6630

Attorneys for Appellant

TABLE OF CONTENTS

Administrative Hearing Commission's (September 7, 2005)	
Decision	A1
144.030.2(5)	A37
144.615(3)	A38
12 CSR 10-111.010	A39
12 CSR 10-103.600	A43
Tax and Accounting Software v. Oklahoma Tax Commission,	
OK Tax Ren. (CCH) ¶200-796 (Okla. Ct. App. Feb. 25, 1997	Δ15

3